CURRENT LISTING OF CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of claims:

1 – 88. (cancelled without prejudice)

89. (currently amended) A profit ~~purchasing risk~~ management method ~~implemented by a computer including a processor~~, comprising:

using a ~~the~~ processor in a computer to complete at least one of the steps of:

compute a vendor mix from one or more prior purchases, one or more future commitments, and a forecast inventory depletion for each period of a forecast planning period based on one or more scenarios for an item demand, an item price, and an item availability ~~and a specified service level~~ for each of a plurality of items used by an organization;

compute one or more variables for each item based upon the computed vendor mix wherein the one or more variables are selected from the group consisting of a quantity variability risk measure, an obsolescence time risk measure, a quantity trend risk measure and combinations thereof;

develop a linear model of an organization profit,

perform an optimization calculation using the organization profit model where said calculation comprises ~~that incorporates~~ one or more item demand forecasts that have been developed using the one or more variables, and

generate and output a list of actions that will maximize a business profitability using the results of said optimization calculation.

90. (previously presented) The method of claim 89, wherein the list of actions comprise a set of item quantities that should be purchased from each of one or more vendors.

91. (previously presented) The method of claim 89, wherein the list of actions comprise a set of item quantities that should be purchased from each of one or more vendors for a given set of discount schedules.

92. (previously presented) The method of claim 89, wherein the one or more variables comprise an item obsolescence risk variable.

93. (previously presented) The method of claim 89, wherein the one or more variables comprise a variable that combines an item trend variable, an item demand variability variable and an item obsolescence risk variable.

94. (previously presented) The method of claim 89, wherein the one or more variables comprise one or more metrics.

95. (previously presented) The method of claim 89, wherein the one or more variables comprise a variable that combines a normalized item trend variable, a normalized item demand variability variable and a normalized item obsolescence risk variable where the scale of the item risk variable is reversed.

96. (previously presented) The method of claim 95, wherein the variable has a utility in developing a composite forecast.

97. (currently amended) The method of claim 89, wherein the method further comprises:

preparing a plurality of data related to a commercial enterprise for use in analysis,

identifying a set of data required for analyzing the commercial enterprise from the prepared data,

analyzing the set of data in an automated fashion as required to identify one or more statistics, and

using the statistics and the set of data to develop a linear or nonlinear model of an enterprise current operation financial performance using one or more automated learning techniques

where the commercial enterprise physically exists, and

where the set of data comprises the one or more variables computed for each item based upon the computed vendor mix.

98. (currently amended) A non-transitory computer program product tangibly embodied on a computer readable medium and comprising a ~~non-transitory~~ program code for directing a computer with at least one processor to:

compute a vendor mix from one or more prior purchases, one or more future commitments, and a forecast inventory depletion for each period of a forecast planning period based on one or more scenarios for an item demand, an item price, and an item availability ~~and a specified service level~~ for each of a plurality of items ~~items~~ used by an organization;

compute one or more variables for each item based upon the computed vendor mix wherein the one or more variables are selected from the group consisting of a quantity variability risk measure, an obsolescence time risk measure, a quantity trend risk measure and combinations thereof;

develop a linear model of an organization profit,

perform an optimization calculation using the organization profit model where said calculation comprises ~~that incorporates~~ one or more item demand forecasts that have been developed by using the one or more variables, and

generate and output a list of actions that will maximize a business profitability using the results of said optimization calculation.

99. (previously presented) The computer program product of claim 98, wherein the list of actions comprise a set of item quantities that should be purchased from each of one or more vendors.

100. (previously presented) The computer program product of claim 98, wherein the list of actions comprise a set of item quantities that should be purchased from each of one or more vendors for a given set of discount schedules.

101. (previously presented) The computer program product of claim 98, wherein the one or more variables comprise an item obsolescence risk variable.

102. (previously presented) The computer program product of claim 98, wherein the one or more variables comprise a variable that combines an item trend variable, an item demand variability variable and an item obsolescence risk variable.

103. (previously presented) The computer program product of claim 98, wherein the one or more variables comprise one or more metrics.

104. (previously presented) The computer program product of claim 98, wherein the one or more

more variables comprise a variable that combines a normalized item trend variable, a normalized item demand variability variable and a normalized item obsolescence risk variable where the scale of the item risk variable is reversed.

105. (previously presented) The computer program product of claim 104, wherein the variable has a utility in developing a composite forecast.

106. (currently amended) A system, comprising: a computer with a processor having circuitry to execute instructions; a storage device available to said processor with sequences of instructions stored therein, which when executed cause the processor to:

compute a vendor mix from one or more prior purchases, one or more future commitments, and a forecast inventory depletion for each period of a forecast planning period based on one or more scenarios for an item demand, an item price, and an item availability ~~and a specified service level~~ for each of a plurality of items used by an organization;

compute one or more variables for each item based upon the computed vendor mix wherein the one or more variables are selected from the group consisting of a quantity variability risk measure, an obsolescence time risk measure, a quantity trend risk measure and combinations thereof;

develop a linear model of an organization profit,

perform an optimization calculation using the organization profit model where said calculation comprises ~~that incorporates~~ one or more item demand forecasts that have been developed by using the one or more variables, and

generate and output a list of actions that will maximize a business profitability using the results of said optimization calculation.

107. (previously presented) The system of claim 106, wherein the list of actions comprise a set of item quantities that should be purchased from each of one or more vendors.

108. (previously presented) The system of claim 106, wherein the list of actions comprise a set of item quantities that should be purchased from each of one or more vendors for a given set of discount schedules.

109. (previously presented) The system of claim 106, wherein the one or more variables comprise an item obsolescence risk variable.

110. (previously presented) The system of claim 106, wherein the one or more variables comprise a variable that combines an item trend variable, an item demand variability variable and an item obsolescence risk variable.

111. (previously presented) The system of claim 106, wherein the one or more variables comprise one or more metrics.

112. (previously presented) The system of claim 106, wherein the one or more variables comprise a variable that combines a normalized item trend variable, a normalized item demand variability variable and a normalized item obsolescence risk variable where the scale of the item risk variable is reversed.

113. (previously presented) The system of claim 106, wherein the variable has a utility in developing a composite forecast.

114. (currently amended) The system of claim 106, wherein the sequences of instructions stored in the storage device also cause the processor to:

prepare a plurality of data related to a commercial enterprise for use in analysis,

identify a set of data required for analyzing the commercial enterprise from the prepared data,

analyze the set of data in an automated fashion as required to identify one or more statistics, and

use the statistics and the set of data to develop a linear or nonlinear model of an enterprise current operation financial performance by using one or more automated learning techniques

where the commercial enterprise physically exists, and

where the set of data comprises the one or more variables computed for each item based upon the computed vendor mix.

115. (currently amended) A system, comprising: a computer with a processor having circuitry to execute instructions; a storage device available to said processor with sequences of instructions stored therein, which when executed cause the processor to:

receive a plurality of item volume data ~~information~~;

transform at least a portion of said data into at least one risk measure for each item, wherein the at least one risk measure is a quantity variability measure, an obsolescence time measure and a quantity trend measure;

receive at least one market input parameter characterizing a market for one or more products that incorporate said items;

develop a linear model of an organization profit using said item and market data,

perform an optimization calculation using said organization profit model that incorporates at least one risk measure using the at least one market input parameter to generate and output at least one set of optimal purchasing requisitions for said items~~; and~~

~~manage a supply chain risk based on said set of requisitions~~.

116. (previously presented) The system of claim 115, wherein the set of optimal purchasing requisitions maximizes a business profitability.

117. (previously presented) The system of claim 115, wherein the one or more risk measures comprise a variable that combines the quantity trend measure, the quantity variability measure and the obsolescence time measure.

118. (previously presented) The system of claim 115, wherein the one or more measures comprise one or more metrics.

119. (previously presented) The system of claim 115, wherein the one or more risk measures comprise a variable that combines a normalized quantity trend measure, a normalized quantity variability measure and a normalized obsolescence time measure.

120. (previously presented) The system of claim 119, wherein the variable has a utility in developing a composite forecast.

121. (currently amended) A computer program product tangibly embodied on a computer readable medium and comprising a non-transitory program code for directing a computer with at least one processor to:

receive a plurality of item volume data ~~information~~;

transform at least a portion of said data into at least one risk measure for each item, wherein the at least one risk measure is selected from the group consisting of a quantity variability

measure, an obsolescence time measure and a quantity trend measure;

receive at least one market input parameter characterizing a market for one or more products that incorporate said items;

develop a linear model of an organization profit using said item and market data,

perform an optimization calculation using said organization profit model that incorporates at least one risk measure using the at least one market input parameter to generate and output at least one set of optimal purchasing requisitions for said items~~; and~~

~~manage a supply chain risk based on said set of requisitions~~.

122. (previously presented) The computer program product of claim 121, wherein the set of optimal purchasing requisitions maximizes a business profitability.

123. (previously presented) The computer program product of claim 121, wherein the one or more risk measures comprise a variable that combines the quantity trend measure, the quantity variability measure and the obsolescence time measure.

124. (previously presented) The computer program product of claim 121, wherein the one or more measures comprise one or more metrics.

125. (previously presented) The computer program product of claim 121, wherein the one or more risk measures comprise a variable that combines a normalized quantity trend measure, a normalized quantity variability measure and a normalized obsolescence time measure.

126. (previously presented) The computer program product of claim 125, wherein the variable has a utility in developing a composite forecast.

127. (currently amended) An advanced profit ~~purchasing risk~~ management method ~~implemented by a computer including a processor~~, comprising:

using a ~~the~~ processor in a computer to complete at least one of the steps of:

receive a plurality of item volume data ~~information~~;

transform at least a portion of said data into at least one risk measure for each item, wherein the at least one risk measure is selected from the group consisting of a quantity variability measure, an obsolescence time measure and a quantity trend measure;

receive at least one market input parameter characterizing a market for one or more

products that incorporate said items;

develop a linear model of an organization profit using said item and market data,

perform an optimization calculation using said organization profit model that incorporates at least one risk measure using the at least one market input parameter to generate and output at least one set of optimal purchasing requisitions for said items~~; and~~

~~manage a supply chain risk based on said set of requisitions~~.

128. (previously presented) The method of claim 127, wherein the set of optimal purchasing requisitions maximizes a business profitability.

129. (previously presented) The method of claim 127, wherein the one or more risk measures comprise a variable that combines the quantity trend measure, the quantity variability measure and the obsolescence time measure.

130. (previously presented) The method of claim 127, wherein the one or more measures comprise one or more metrics.

131. (previously presented) The method of claim 127, wherein the one or more risk measures comprise a variable that combines a normalized quantity trend measure, a normalized quantity variability measure and a normalized obsolescence time measure.

132. (previously presented) The method of claim 131, wherein the variable has a utility in developing a composite forecast.